

Cornell University

College of Agriculture and Life Sciences Department of Landscape Architecture Christjan Gruber, Master Candidate Christopher Hardy, Master Candidate Christopher Horton, Master Candidate Declan Keane, Master Candidate Lee M. Pouliot, Master Candidate Deni Ruggen, Professor



Results of the Community Survey for the Uniroyal Facemate Redevelopment Plan Chicopee, MA Completed: April 1, 2010

Executive Summary

This report is the result of a survey that was distributed in Feburary and March of 2010. The survey solicited information from the citizens of Chicopee, Massachusetts, concerning the Uniroyal Facemate Property, local history education, river usage, desired future public amenities, and visioning for the City. This information is intended to assist the Uniroyal Facemate Redevelopment Plan that is currently underway.

404 participants took part in the survey. This sample size is large enough to extrapolate with confidence for the views of the City's population. Younger generations responded proportionally more than older generations, and so the data is slightly biased in favor of those 18-35. The impact of this bias is documented and incorporated into all recommendations.

The three most important results from this survey are:

- The citizens of Chicopee want a waterfront park with a walking and bicycling trail. They would like to see the Facemate tower, and if possible, the Uniroyal office building preserved. Other structures were not particularly favored.
- 2. The citizens of Chicopee want more river access, primarily for walking along and viewing, but also for canoeing, kayaking, and fishing.
- The citizens of Chicopee would like to see Chicopee Center revitalized into a vibrant, mixed use community similar to Northampton.

The scale of survey response, and the length and complexity of the survey, provided a large base of information that can be used for many different purposes in the redevelopment process. If there are any questions in regard to a particular result or analysis, please call Chris Hardy at 607-592-7195.

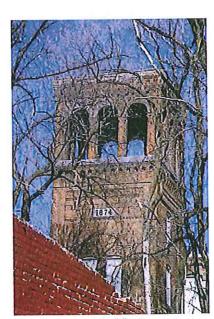


figure 1: Facemate building tower

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Introduction

Uniroyal Facemate Redevelopment Plan

The Uniroyal Facemate Property is located in Chicopee, MA. The property is a former industrial complex that has been abandoned for over 20 years. During that time, the buildings have deteriorated, in some cases to the point of collapsing.

The Uniroyal Facemate Redevelopment Plan is currently being completed by the City of Chicopee with consultants VHB, RKG and BETA, among others. This plan is intended to create a feasible vision for the future of the property. The site is faced with many constraints. A very low market for development forces all projections for residential or commercial infill to be extended out 20 years in order to be plausible. The existing flood protection system compromises more than an eighth of the total area of

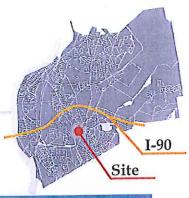




figure 2: Facemate property



figure 3: Uniroyal property

the site. The former industry has left a legacy of contamination that requires a remediation plan. Within these constraints, the Redevelopment Plan will create a goal for the City of Chicopee to move toward, incorporating development, open space, and new amenities.

Although the site has many constraints, there are also many opportunities. These factories are adjacent to Chicopee Center, and the land use is instrumental to the downtown character. The buildings are already registered with Mass Historic, and the legacy of the workers who built Chicopee can be told through historic preservation, either with particular buildings, a museum, or architectural salvage. The site currently cuts off the Chicopee Falls neighborhood from the Chicopee River. Reestablishing a connection with the river, promoting civic pride through history, and open space programming are all non-market based strategies that are options for the site. The refurbishment of the long abandoned factories can be a turning point for the city, a step towards redefining downtown and showcasing the citizens of Chicopee's values.

Purpose of the survey

This survey is a research tool that is intended to inform the designers, consultants, and decision makers for the Redevelopment Plan of the opinions of the citizens of Chicopee. The survey was organized around four issues that community input would be helpful for this process. The first issue was the identity of the site and knowledge of it's history. Preliminary talks with community members indicated that there is little sense of history in the City of Chicopee, primarily with the younger population, and there is a need for increased history education and celebration. Since many of the buildings cannot be saved, the survey was used to get community input on which structures they would prefer be saved. The survey was also used to quantify the use and potential value of the use of the Connecticut and Chicopee Rivers, and identify what activities citizens would like to have access to on the Chicopee River. Finally, the survey asked the citizens of Chicopee about what they want to have on the site and in their city. These opinions, and relationships between different neighborhoods and age groups, will help build a framework for the redesign, grant applications, and public expenditures for non-market amenities that this site could support.

Note: We are a group of Landscape Architecture students from Cornell University. We have worked with Tom Haberlin, the City Economic Development Director, and Stephen Jendrysik, local historian, in the development and distribution of this survey. All survey responses are collected in an anonymous fashion. All results, save direct quotes, are based on generalizations across the data set.

Methods

Survey Questionnaire

In order to determine the citizens' opinions, the survey was developed to collect both quantitative data and qualitative data. The quantitative data could be used for value based, option based, or frequency based information. The qualitative questions were reserved for future visioning and past memory reflection about the site and city. The full questionnaire can be found in Appendix I. The following are the subject questions asked. The highlighted questions are the qualitative text responses.

Q6: Which neighborhood do you think the former Uniroyal / Facemate Industrial complex shown above is in?

Q7: What experiences have you had with this site?

Q8: What elements would you like to see in

Chicopee 30 years from now?

Q9: Do you have any stories of or connections to the Uniroyal/Facemate site?

Q10: Which products do you think were made on or near this site?

Q11: How far do you think Chicopee's industrial influence has extended?

Q12: How do you use the Connecticut River?

Q13: Please select any of the activities below that you may have done on the Chicopee River?

Q14: What activities would you like to participate in on the Chicopee River?

Q15: Which of the following open space amenities are in highest demand in Chicopee?

Q16: What new buildings do you think are in highest demand?

Q17:Where do you go for recreation and entertainment?

Q18: Imagine 20 years from now, what would you be excited to see in Chicopee?

figure 4: Paper survey packet, introduction, questions and open response

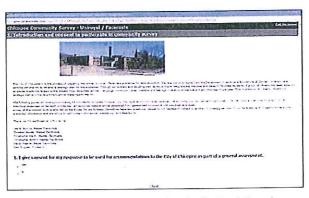


figure 5: Online survey using the professional subscription of SurveyMonkey.com. http://www.surveymonkey.com

Distribution

The survey was distributed in two manners. The first was online, using SurveyMonkey.com as a accessible website that citizens could log onto and complete. The second manner was through paper surveys. Since the participation was self selective on the survey, distribution and advertisement were targeted to each specific age group and community to aim for a representative sample for the demographics of the city.

figure 6: Survey station

The survey was self selected, the degree of interest in the project may be higher than the city average for the survey participants, but this cannot be proven or disproven.

The online survey was advertised on the City of Chicopee's website, in the Chicopee Register (a local newspaper), and to the Chicopee and Chicopee High Facebook groups.

The paper survey was distributed via the Chicopee Public Library, the Chicopee Senior Center, Profiles Salon, Edward Bellamy Historic Society, and in the office of Selser Memorial School.



Survey Response

Sample Size

404 people responded to the survey. 105 of the responses were paper, the rest were online. Based on Cochran's equation, the sample size needed for a 95% confidence level for the population of Chicopee (54,653 by the 2000 Census) would be 384 responses. ¹ This means that all conclusions drawn have a confidence interval of 5%. In other words, the sample would be representative to the characteristics of the city population, as long as the sample bias was considered.

$$n_0 = {Z^2pq}/{e^2}$$

figure 7: Cochran's equation to determine sample size for a large population (n). Z² is the abscissa of the normal curve that cuts off an area at the 95% confidence level.

NOTE: The number of responses for the survey are large enough to be considered representative for the city population, as long as sampling bias is considered. All mean values from the results would not be expected to change greater than +/- 5% if the entire population of Chicopee participated.

Survey Bias: Demographics

The method of survey distribution can have a significant effect on the sample creating a sample bias.2 The nature of self selection also causes a bias. In general, the response numbers were equal between 19 to 55 year old citizens, with tapering numbers for 55-75, and lowest for over 75. This is likely due to the targeting of college age citizens via Facebook, balanced by the paper survey distribution and the City website. The older population was targeted at the senior center. The proportion of responses to the proportion of age groups in the city shows a much higher proportion participation by ages 19-35. This means all general conclusions favor the younger population of Chicopee. The Analysis of Results section compares the difference in opinion between the younger and older populations of Chicopee.

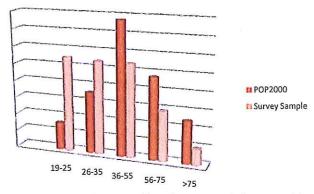


figure 8: Sample Bias: comparison of survey sample to census data by percentage per age group. This chart shows how the sample demographics does not reflect the demographics of Chicopee.

No surveys were counted from participants under 18. One unusual note was that the average survey respondent had lived in Chicopee for 30 years, with a standard deviation of 16 years. This meant that the average respondent had lived in Chicopee for greater than 80% of their life - the survey respondents are citizens for whom Chicopee has always been their primary home.

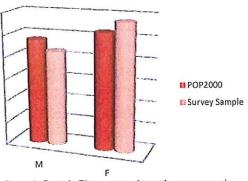


figure 9: Sample Bias: comparison of survey sample to census data by percentage per gender.

An unexpected bias was a disproportionately high representation of women to men in the survey. This could possible be due to the paper survey stations in the school and Profiles Salon, but could also be an indication of self selection. The difference is subtle enough that for any mean greater than 5% difference this sampling error can be discounted. Nevertheless, the survey had more female participants proportionally than would be reflected by a perfectly random sample of Chicopee.

¹Cochran, T.D.; Harvey, S. 2008. Homology and derived series of groups II: Dwyer's Theorem. *Geometry & Topology*, Vol. 12, pp. 198

²Lapane, K. 2009. A comparison of two distribution methods on response rates to a patient safety questionnaire in nursing homes. *Journal of the American medial Directors Association*, Vol. 8, no. 7 pp. 4461



Survey Response (con.)

Survey Bias: Neighborhood

The site is located in the neighborhood of Chicopee Falls. It is likely that the high visibility of the site and awareness of the redevelopment process influenced participation. Community members participated in greater numbers from Chicopee Falls than any other neighborhood. In the Analysis of Results section, their opinions are compared to the rest of the City's population.

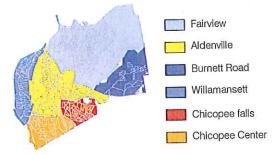


figure 10: Map of neighborhoods. The survey simplified neighborhoods into larger units through limiting options.

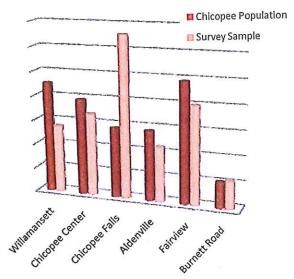


figure 11: Neighborhood representation as a percentage of City Population per the 2000 Census and the sample group.

Chicopee Falls demographics and economics are subtly different from other Chicopee neighborhoods. Chicopee Falls generally has a higher ethnic diversity, higher renter occupied residences, and lower population density than the rest of Chicopee, specifically the part of the neighborhood formerly referred to as Chinatown. The average age is not significantly different from the rest of the city.

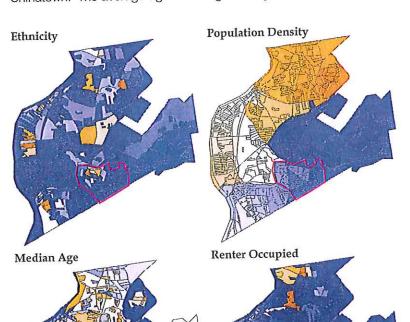


figure 12: Demographic information for the City of Chicopee based on the 2000 Census.

Ethnicity: Orange is the highest nonwhite population, blue is the most white population.

Population Density: Orange is the highest population density, blue the lowest.

Median Age: Orange is the oldest average age, Blue is the youngest (or no population).

Renter Occupied: Orange is the highest renter occupied population, Blue is the highest owner occupied (or no population).



Results

Part 1a: Site Identity and Preservation

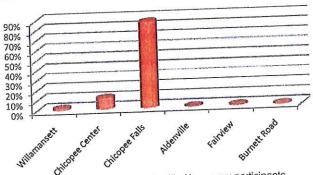


figure 13: Site neighborhood as identified by survey participants.

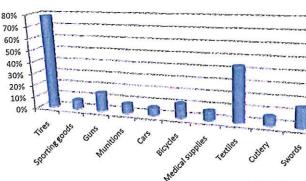


figure 14: Products produced on site as identified by participants.

Experience Respondents had with site	had
Expellence heady active	2.07%
Worked on the site when it was active	1.38%
Worked on the site after it was abandoned	18.76%
A family member worked on the site	9.79%
Informally explored the site	43.17%
Driven past the site	21.38%
Walked past the site	3.459
Not familiar with the site	11

figure 15: Participant relationship to or experience with the site.

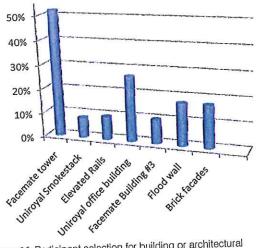


figure 16: Participant selection for building or architectural remnant preservation.

To understand how visible the site is to the residents of Chicopee, the survey asked the participants to locate the neighborhood of the site. The overwhelming response was the correct neighborhood, Chicopee Falls, or the adjacent neighborhood, Chicopee Center. This clearly shows that the site is not invisible to the citizens of Chicopee, and is recognized as a landmark in the landscape.

To understand the generally held public knowledge of the history of the industry, the survey asked which products from a list were made on the site. A large majority of Chicopee citizens recognize that tires were made on the site, this may have to due with the scale of employment, recent nature of the industry, or even the smell associated with the industry. Only about 40% of respondents recognized textiles as being made on the site. The rest of the products, all of which were at one time made on the site, were ranked below 25% by recognition count. We can conclude that the knowledge of the extents of the industrial history of the site is not generally known in Chicopee.

The majority of the survey respondents had little experience with the site. The primary ways participants identified their experience was through driving or walking past the site. An unexpected result was that 18.76% of the sample, 76 people, noted that they had family members who worked on the site while the factories were active. Due to the extents of the sample size, it is not an exaggeration to state with 95% likelihood that almost a fifth of the citizens of Chicopee have a relative who worked on the site. This identity is not direct, for only 3.45% of respondents have personally worked on the site at some point, and only 9.79% have otherwise explored the site.

52% of respondents indicated that they would like to have the tower on the Facemate building preserved. The next highest vote was for the Uniroyal office building. Other charismatic structures, such as the smokestacks, were not significantly preferred for preservation.



Part 1b: Written Responses

To the open response question about personal experience with the site, 55 of the participants wrote about relatives who had worked on the site, 13 wrote about the former haunted house that used to be hosted in the Uniroyal office building, and 10 wrote about their experiences working on the site. These responses are compared in two ways. The first is figure 17, a Wordle.com diagram. This diagram graphically shows the number of times a particular word was repeated (common English words are filtered out). As one can see, the memories shared were primarily related to the work on the site, the companies themselves, relatives, and events (either the haunted house or fires). Below

the Wordle diagram are particular quotes that stood out from total survey as representative or well worded. These quotes reveal the good and bad memories of the site and industry, and mention programs or activities that could be brought back, such as the haunted house, a picnic area behind the Facemate tower, a softball diamond, and a farm stand.



figure 17: This diagram was generated using Wordle.com. The size of the words reflect the number of times they were used in total from all survey respondents. This reflects key ideas and what subjects were most often repeated.

Super Quotes:

Negative Memories:

"I still remember the smell of rubber in the air as I grew up."

"In high school teachers would warn that 'drop outs' would go to Uniroyal University."

"My dad worked at Fisk for 3 days - his skin started to turn yellow from the tire resign, and he left his job."

"My grandparents worked there, lots of people worked there. It smelled really bad but it paid enough that they could survive and raise their kids. It all ended and Chicopee is left with this big monument... Please do not make things worse... it has so much potential, it just needs a gentle hand.

Positive Memories:

"My first job was with Chicopee mtgco (Johnson & Johnson) where we made cotton products from the Greigh mill to finished goods.... It would be great if the Greigh mill portion could be preserved.

"During my early 20's I played semi-professional softball for a woman's team that was sponsored by Uniroyal. Uniroyal built a softball diamond next to the building, where we played ball every Sunday."

"My father and grandfathers worked for Fisk/Uniroyal. As a child, I was able to watch tires being made."

"-My- family came to Chicopee in 1944 from economically depressed Vermont for a job in defense work during WWII. My father was given a job and housing for his family. At the time it was the Fisk Rubber Co. In time extended family members also arrived."

"My family came here from Poland and these factories are how they survived. My grandfather and his father worked for savage arms, my great grandmother worked for Johnson and Johnson and was even involved in the first 'strike,' - my aunts and uncles were foremen at Uniroyal. Please clean this area up and make it a resource for Chicopee again."

"My grandfather worked there many moons ago, my parents would tell me stories of when my grandmother and father would sit in their car and wait for my grandfather to get out of work. My father worked at facemate for at least 10 years. I also worked there for a summer when I was 16. I have a lot of memories of company picnics behind the old facemate tower."

"It's part of the fabric of the landscape... many citizens worked there and have ties... it's become a landmark."

"My mother worked as a tire builder at Fisk/Uniroyal for 34 years. My father owned a family farm in Hadley, MA. Every summer we would fill our car with sweet corn, strawberries and cukes. We would park on oak st and sell vegetables to the Uniroyal employees when they were leaving work.

Events:

"My father was a Chicopee Fire Fighter and went to Facemate several times for fires, including the huge fire caused by a lightning strike where they lost the building and had to call in several other fire departments from nearby cities to fight the fire."

"I remember going to a haunted house put on by Chicopee High School in the Uniroyal office building when I was about 8 years old! I still remember it to this day... it's a great memory!"

"For several years my father's friend used the Uniroyal office building as the site for an annual haunted house."

"I remember walking out of the department store as a child and seeing the whole sky light up with orange when the building exploded. I was a little guy and the store was Two Guys.



Part 2: Relationship with the River

The site is bordered by the Chicopee River on the north and west sides of the site. The factory complex serves as a barrier between the neighborhood of Chicopee Falls and the riverfront along this section of the river. The survey hypothesis was that the Chicopee River would be significantly less used do to its low level of accessibility.

To test this hypothesis, survey participants were asked to mark how they used the river from five options: viewing, fishing, boating, birding and walking or bicycling along. For each of these options they were further asked to rank frequency of use, daily, weekly, monthly and annually. This data was compiled from all participants. Each score was ranked per frequency (a daily use = 365, weekly use = 52, monthly use = 12, and annual use = 1) and summed to determine an estimate of the number of daily experiences per year per activity.

Connecticut River	Viewing	Fishing	Boating	Birding	Walking/bicycling	
Annual experiences (sample)	48769	1187	1040	4296	7233	
Experiences per citizen per year	120	3	3	11	18	
Hypothetical value per experience*	0.2	2	5	0.2		
Total experiences per year	6581165.8	160180.5	140343.51	579726.6		
Hypothetical value per year*	\$1,316,233	\$320,361	\$701,718	\$115,945	\$976,062	\$3,430,319
Chicopee River						
Annual experiences (sample)	42700	2123	930	5703	7439	
Experiences per citizen per year	105	5	2	14	18	
Hypothetical value per experience*	0.2	2	5	0.2		
Total experiences per year	5762180.5	286489.7	125499.48	769595.2		
Hypothetical value per year*	\$1,152,436	\$572,979	\$627,497	\$153,919	\$1,003,861	\$3,510,693

figure 18: This table shows the number of daily experiences per year, and the hypothetical associated value.

When this information was compiled, the total experiences were divided to average number of daily experiences per person per year. Each activity was assigned a monetary value. These values are based on "contingent valuation," where individuals are asked how much they are willing to pay for something, or how much they would ask to be paid if the rights were taken away. This theoretical value can then be put on a non-market based product.¹ Valuation questions were not included in the survey, and would be needed to determine price tags that are appropriate for the Chicopee market. These values were loosely based (more conservative) on recreation values taken from Hitzhusen's compilation on the Great Lakes watershed,² but for any serious valuation conclusions the local market and values would need to be assessed. These numbers provide a generalized estimate of the value of the rivers annual contribution to the viewshed and recreation.

The surprising conclusion from these questions is that there is not a significant difference in the number of daily experiences per year between the two rivers. We cannot conclude that the Chicopee River is under used, but we can conclude that it is visible to the community and is a recreational resource for the city.

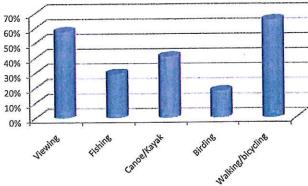


figure 19: This chart shows the activities respondents indicated they would like to participate on or along the Chicopee River.

When asked what activities the participants wanted to do on or along the Chicopee River, the vast majority (65%) indicated walking or bicycling. Viewing the river was still a majority (57%), followed by Canoeing/kayaking (41%). Due to the scale of the sample size, both walking and viewing can be confidently considered to be desired by the citizens of Chicopee.

¹Cameron, T.; James, M. 1987. Efficient Estimation Methods for "Closed-Ended" Contingent Valuation Surveys. The Review of Economics and Statistics, Vol. 69, no. 2 pp. 269-276

²F.J. Hitzhusen (Ed.), Economic Valuation of River Systems. Edward Elgard, Cheltenham UK, 2007. ISBN 978 1 84542 634 7

Part 3: Future Activities

The goal of this section of the survey was to determine what Chicopee's citizens think the city needs. These questions were divided up into two sections: outdoor recreational program and built program.

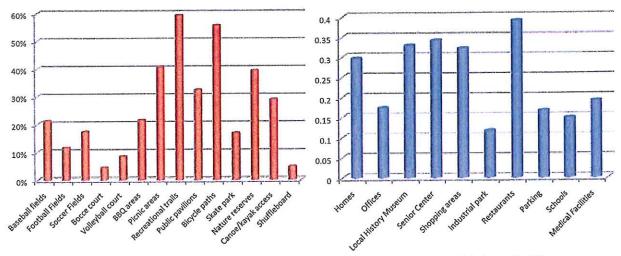


figure 20: These chart shows what percentage of survey participants considered each program to be of high demand in Chicopee.

It is clear from the response that recreational trails are in high demand in the city, with over 55% voting for bicycle trails and 59% for walking trails. The next highest outdoor programs were nature reserves and picnic areas. Over a fifth of the sample also wanted to see more canoe/kayak access, public pavilions, BBQ areas and baseball fields.

The citizens voted in significantly lower numbers for built program. Outdoor program received 1465 total votes, while indoor program received exactly 1000. This may be due to fewer options, or less interest. The most popular programs were restaurants, followed by the senior center - although no programs ranked in a majority opinion. Other programs that ranked above a fifth of the population were a local history museum, more shopping areas and more homes (note: there were many comments against low income housing being built).

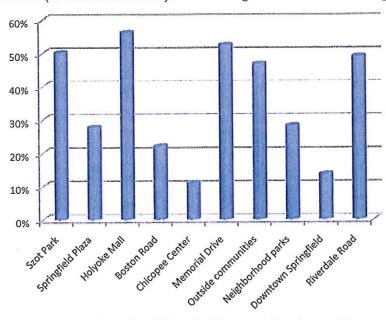


figure 21: This table shows where Chicopee's citizens currently go for recreation.

In order to gauge the character of Chicopee Center, the survey asked the participants where they currently go for entertainment recreational areas. The results show that the vast majority of the population (89%) do not use downtown. Instead, the highest ranking places were the Holyoke Mall and Memorial Drive. One area of considerable note, in Chicopee Center and nearby the site, was Szot Park. This park is remarkably popular, with just over half of the participants indicating they use the park for recreation.

Part 4: Imagine Chicopee in 20 years...

This question was an open response asking the participants what they would like to see in Chicopee in 20 years. Besides more jobs (which was mentioned in some form by most participants), the most frequently mentioned vision was for Chicopee Center to undergo a renaissance, developing a character that was often cited to be "like Northampton." A combination of restaurants, boutique and name brand stores, and a walkable shopping district were all elements of this vision. The next most discussed item was a river walk and waterfront park along the Chicopee River. The third most mentioned program was a theater space, either movie or performance. This was tied with more places for teens to recreate.



figure 22: This diagram was generated using Wordle.com. The size of the words reflect the number of times they were used in total from all survey respondents. This reflects key ideas and what subjects were most often repeated.

Super Quotes:

Future for the City: "parks and jobs"

"Get culture (arts, music, museums) into the city. Stop the 'memorial drivization' of the city."

"I would like to see a thriving downtown area with shops, restaurants, not what is currently there. I want to see the community become more or a cultural center."

"A Family Friendly Area that showcases the beauty of the river and the natural surroundings by the river. It would also be great to have a museum that speaks to the industrial past of this city. I think we have forgotten our past and now consider ourselves the city of walmart, home depot, and ocean state job lot. This is sad..."

"I would like to see Chicopee revive as a 'college town,' similar to North Hampton (Smith College), or the area around Mt. Holyoke College in South Hadley or the Amherst Common (Umass / Amherst College). I believe with a vision and collaboration with businesses and the Elms College community that vision could be realized. I would like to see the abandoned factory buildings near Chicopee Center and the Falls area used for museums, art galleries, diverse restaurants, Senior Centers, Tennis Centers, bookstores, condos / apartments etc. I would love for the community to enjoy a nature walk / bike path along the Chicopee River."

"I would like to see re-investment in the city itself. We have been struggling with a "who we are" scenario. If I were to continue being a resident of Chicopee, I would envision an "industrial" themed place that functions much like Northhampton. Vibrant, alive with shopping, art and performance, restaurants, open aire markets - a place to be a local destination special to the city's residents. I also envision a re-investment in Chicopee's natural resources. The CT and Chicopee rivers and under utilized often invisible places. I want to see an urban ecology develop. Where the city protects 'green' instead of preparing more areas for development. Chicopee was once a leader in western Massachusetts - why can't we once again be a leader in showing other small cities how to re-invent in an historic context to be successful in the future."

Future for Uniroyal Facemate Property:

"I would love to see Uniroyal/Facemate property cleaned up and a recreational facility turned into something that could be used be the whole Chicopee Community."

"Some of the city's historic buildings still standing. The same amount of fewer parking lots in Chicopee Center. (They seem presently to be half empty or eye sores.) A local history museum to showcase Chicopee's products (Ames swords & castings, stevens -doryea automobiles, overman wheel co. which was written up in scientific American) and people."

"We need more open space, and more motion to keep people who grew up in the city interested and able to stay in the area. I think we also should celebrate the history of the city and try to bring back "Cabotville" (Chicopee Center), "Skipmuck" (Chicopee Falls). I would like to see the Falls cleaned up and re-done (it is an eyesore - a result of the glorious age of urban renewal, which ruined the village). The city has also grown on the backs of French Canadian and Polish immigrants - cafe culture...imagine a beautiful Cabotville with cafes, bookstores, ethnic restaurants (not just French and Polish, but Puerto Rican, Portuguese, etc...some already exist). Also, the mouth of the Chicopee River could be a wonderful nature preserve!"

"In this area, I'd be excited to see brick sidewalks from the demolished buildings, Maybe a park with a water play area for kids in the summer. and maybe some small retail. restaurants..."

"Cutting-edge tech industry and research facilities related to alternative energy or nano-tech, incorporated with a green buffer between industrial operations and the river, with a bike path and walking trail(s)."

"Should I live so long... I would be really happy to see some kind of remembrance, some kind of recognition given to all the various cultures and immigrants (Polish and French Canadian mostly). I would also like to see the name "Fisk" because that is what it was to them. "My vision for the Uniroyal/facemate property would be a mixed use: Over 55 housing units or condominiums, a business park with offices, medical facilities and small commercial units, a senior center and local museum, a restaurant, recreation along the riverfront, a river walk/bike path and picnic area."

Analysis of Results

The effect of age: knowledge of site & preservation values

To better understand both the survey bias and the population of Chicopee, we decided to analyze how age and location affect the results.

To compare the older population with the younger population, we determined average responses per age group. Site knowledge was evaluated by correctly identifying the site neighborhood, the products made on the site, the scale of the sites influence, and personal experience with the site. For personal experience, the intensity of the experience was ranked. Working on the site highest (10), a family member working on the site was an order of magnitude reduced(1), and driving by the site as the lowest (.1).

The older population is significantly more knowledgeable than the younger population (p value .007). This confirmed our hypothesis. This means the overall results are slightly skewed towards a population with less knowledge of the site than the average Chicopean - self selection bias not included.

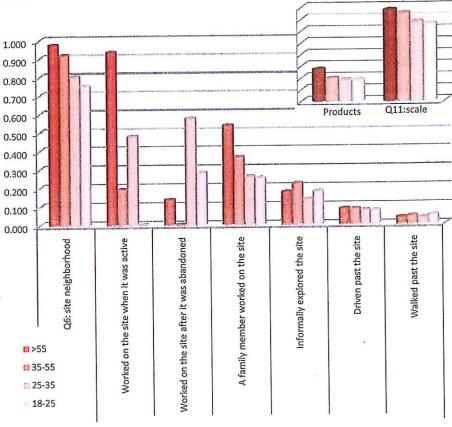


figure 23: The relationship between age and knowledge of the site.

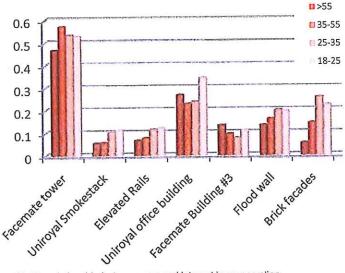


figure 24: The relationship between age and interest in preservation.

When applying the same technique to question 8, 'which elements would you like to see in Chicopee in 20 years,' we found an unexpected result. The younger population of Chicopee, 18 to 35, is significantly more interested in preservation than the older population (p value .01). The reason for this can only be speculated about. It is possible that the site is more associated as mysterious ruins and relics to the younger population, or perhaps the 'past as history' may be more forgiving to the memory of the site than the 'past as memory of actual working conditions.' Since the younger generation is also removed from the period of closing and ioblessness, there may be less bitterness or disappointment associated with the relics.

Analysis of Results (con.)

The effect of age: preferred future

The effect of age was very specific to the program. No generalizations can be drawn in terms of the different age groups interest in the Chicopee River, new built amenities, or new outdoor amenities. Individual differences can be identified, however.

The younger population (<35) is more interested in active water recreation via fishing and boating than the older population. The older population is more interested in new homes and office space than the younger population.

Generally, the age does not seem to affect likelihood of outdoor program or built program preference.

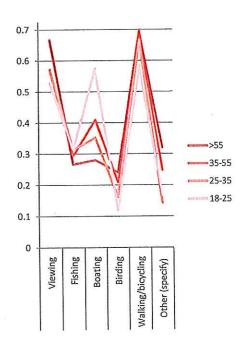


figure 25: The relationship between age and interest in accessibility to different activities on the Chicopee River.

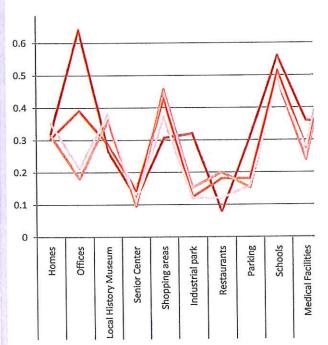


figure 26: The relationship between age and interest in new amenities and buildings.

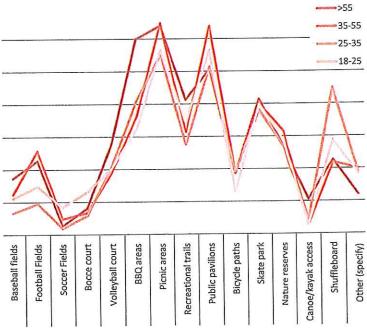


figure 27: The relationship between age and interest in new outdoor programmed spaces and amenities.

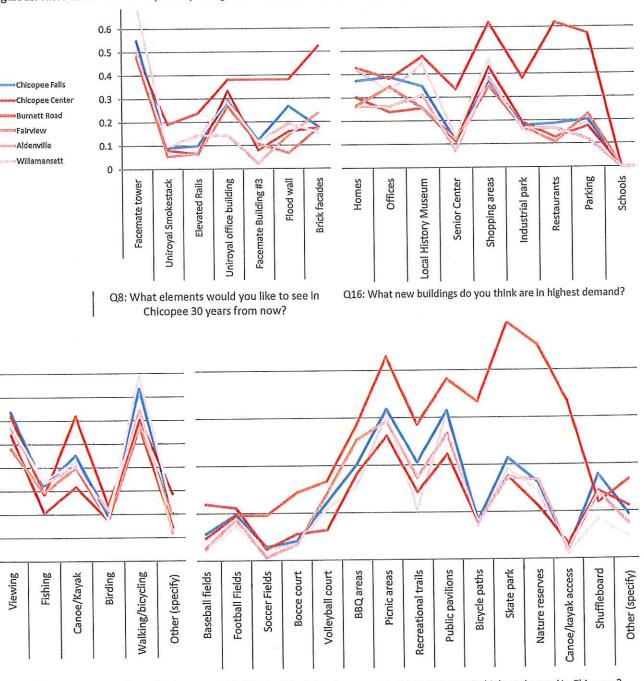


Analysis of Results (con.)

The effect of location: preferred future

To better understand the effect of the proportionally higher representation of the Chicopee Falls neighborhood, we compared their response with other neighborhoods. Under all categories t-tests revealed no significant difference between Chicopee Falls and the average for the other neighborhoods. This means that the overall data is not significantly skewed from the city average by the proportionally higher representation of Chicopee Falls. The one consistent outlier for the neighborhoods was Burnett Road, and this is most likely due to the very low proportional sample (21 respondents).

figure 28: These charts show the responses per neighborhood for preservation, new built amenities, river use and outdoor recreational areas.



Q14: What activities would you like to participate in on the Chicopee River?

Q15: Which of the following open space amenities are in highest demand in Chicopee?

Thomas Eurov

Design Recommendations

Summary of Conclusions for Designers and Policy Makers

- 1. The citizens of Chicopee want a waterfront park. They consistently indicate the desire for more river access and more public open space amenities. The most popular desired amenities are trails, followed by picnic areas, public pavilions, and nature reserves.
- 2. The Chicopee River is already a recognized and used asset for the City. Nevertheless, there is a clear demand for more access. This redevelopment project is perfectly situated to satisfying the demand.
- 3. There is a need for local history education in Chicopee that is currently not being satisfied. As a result, the City's heritage is being lost with the younger generations. There is an opportunity to inspire civic pride through revealing the past. The Industry that formerly occupied the site was formative for the City currently 1 in 5 Chicopeans has a relative who worked on the property.
- 4. The Facemate building tower is the most iconic structure on the site. Funds allocated for the preservation of this tower would be better spent than on any other structure, in terms of public opinion. The Uniroyal office building is also popular, with many wishing to see it refurbished.
- 5. Previous public programs should be brought back, if possible, on the site. There are many memories of the popular haunted house in the former Facemate building and company picnics. There are also stories of a softball diamond adjacent to Uniroyal and a former farm stand.
- 6. Some of the citizens of Chicopee want more restaurants, a senior center, more shopping and a local history museum. No individual 'built' amenity attracted a majority vote, unlike the park amenities.
- 7. The citizens currently don't use downtown for shopping or entertainment, although they would like the option to do so. Citizens consistently reference Northampton as the type of downtown they would like to one day see Chicopee Center as. This indicates a need for a long term revitalization strategy. Since the market and demand does not support increased office or commercial, and very little residential. An alternative strategy is necessary: beautification, public recreation, and event planning are all non-market based strategies that can be the first phase of a revitalization plan.



Appendix I Full Questionnaire





The City of Chicopee is in the process of preparing the former Uniroyal / Facemate properties for redevelopment. We, a group of students from the Department of Landscape Architecture at Cornell University, are working with the city to develop a strategic plan for the properties. Through our process and resulting plan we would like to integrate the interests and ideas of Chicopee residents.

A group of citizens has been selected to answer questions related to the project. Your responses will help us gauge community ideas, interests and feelings in relation to the site and any proposed future uses. This information will directly impact our strategic plan and the recommendations presented to the city.

The following survey will take approximately 20 minutes to complete, however, you may take as much time as necessary. At any time you may refuse to participate or decide not to answer specific questions. All individual responses will be kept confidential; all recommendations will be generated from generalized conclusions not individual responses.

A copy of this consent form is attached to the survey for you to keep. Should you have any questions, please do not hesitate to contact us at HEALChicopee@gmail.com. If you have read and understood the above presented information and are willing to participate in this survey, please sign and date below.

Thank you for participating in this survey!

Lee M. Pouliot, Master Candidate Christian Gruber, Master Candidate Christopher Hardy, Master Candidate Christopher Horton, Master Candidate Declan Keane, Master Candidate Deni Ruggeri, Professor

Signature of Survey Respondent	Date Signed
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Appendix I (con.) Full Questionnaire

Participant	background
I WILLOWALL	Dadingiounic

Age:	
Gender: M/F	
Neighborhood:	
Years as Chicopee Resident	

Survey

1) Which neighborhood do you think the former Uniroyal / Facemate Industrial complex shown below is in?







- O Willamansett
 O Chicopee Center
 O Chicopee Falls
 O Aldenville
 O Fairview
 O Burnett Road
- 2) What experiences have you had with this site? (You may choose more than one)
 - O Worked on the site when it was active
 - Worked on the site after it was abandoned
 - A family member worked on the site
 - Informally explored the site
- O Driven past the site
- O Walked past the site
- I am not familiar with the site
- 3) What elements would you like to see in Chicopee 30 years from now?













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4)	Do you have any stories of or connections to the Uniroyal/Facemate site?	(Please explain.)

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Appendix I (con.) Full Questionnaire

5) Which r	oroduc	ts do you think were made on or	near ti	nis site? (You may	choose	more	e than	one)		
o) milon p	0	Tires	0	Bicycles						
	5	Sporting goods	ö	Medical supplie	 es					
	5	Guns	ō	Textiles						
	0	Munitions	ō	Cutlery						
	0	Cars	ō	Swords						
6) How far	do yo	u think Chicopee's industrial influ	uence			ose	one)			200
O Local		O Massachusetts		O USA		100000	22000000	0	Wor	ld
	you u	se the Connecticut River? (You n	nay ch	oose more than or	ne or nor	ie)	Orce a ded Allest	Artes a trees.	rice & richtly	orco a vest
	0	Viewing		Fre	quency	ON	Pring.	N.P	O V	O Ng
	0	Fishing				0	0	0	0	0
	0	Boating (Including canoeing ar	nd kaya	aking)		0	0	0	0	0
	000	Birding				0	0	0	0	0
	0	Walking/Bicycling				0	0	0	0	_0
	0	Other - Please define:				0	0	0	0	0
8) Have ye O	YesO	ticipated in any of the above acti No s, which, and how often?	vities c	on the Chicopee R	liver?	à	orces a des	Alegel O	A legel	North Bred
	0	Viewing		Fre	equency	O WIE	O W	Wie	b _{le}	- O
	ō	Fishing				0	0	0	0	0
	ō	Boating (Including canoeing a	nd kay	aking)		0	0	0	0	0
	0	Birding				0	0	0	0	0
	ō	Walking/Bicycling				0	0	0	0	_0
	0	Other - Please define:				0	0	0	0	0
9) What a	ctivitie	s would you like to participate in	on the	Chicopee River?						
	0	Viewing								
	0	Fishing Canoe / Kayak								
	0	18000 W. S. W. C. W. C. W. H. S. S. S. W. C. C. H. S. C. C. H. S. C.								
	9	Birding Walking/Bicycling								
	8	Other - Please define:								
	9									_
10) Which	h of the	e following open space amenitie	s are ir	highest demand	in Chico	pee	•			
	0	Baseball fields	0_	Public pavilions						
	0	Football fields	0	Bicycle paths						
	0	Soccer fields	0	Skate park						
	0	Bocce court	ololo	Nature reserves						
	0	Volleyball court		Canoe/kayak ac	cess					
	0	BBQ areas	0	Shuffleboard						
	0	Picnic areas	0	Other - Please D	efine:					
	7	TO SEE BOOK STORY								

Appendix I (con.) Full Questionnaire

11) What new buildings do you think are in highest demand? (You may choose more than one or none)						
	0	Homes	0	Industrial park		
	0	Offices	0	Restaurants		
	0	Local History Museum	0	Parking		
	0	Senior Center	0	Schools		
	0	Shopping areas	0	Medical facilities		
12) Where	e do y	ou go for recreation and entertains	nent? ((You may choose more than one or none)		
	0	Szot Park	0	Memorial Drive		
	0	Springfield Plaza	0	Outside communities		
	0	Holyoke Mall	0	Neighborhood parks		
	0	Boston Road	0	Downtown Springfield		
	0	Chicopee Center	0	Riverdale Road		
13) Imagi	ne 20	years from now, what would you b	e exci	ted to see in Chicopee?		
	(Ple	ease write or draw what you would	like the	e city to be)		
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	1					
	1					
				1		

Thank you!

I. L. A.L. Chicopee Survey

Appendix II

Data CD

Attached is the complete data set for this survey. The excel folder contains the raw and tabulated data as well as each set of analysis, tables and charts organized per question or relationship name on the worksheet tabs. The first tab, data key, will provide a basic outline to the file. The second folder contains the scanned processed paper surveys.